

FIG. 1A

FIG. 1A

FIG. 1B

# Aptamer Selection

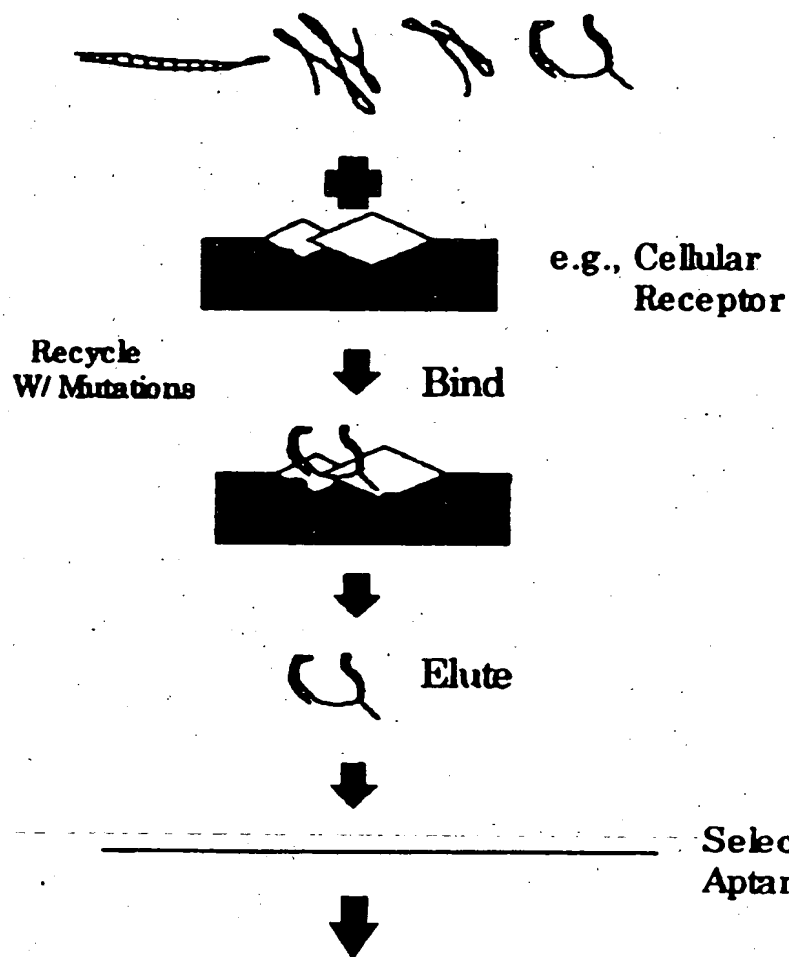


FIG. 1A

FIG. 1B

## Aptamer Generation

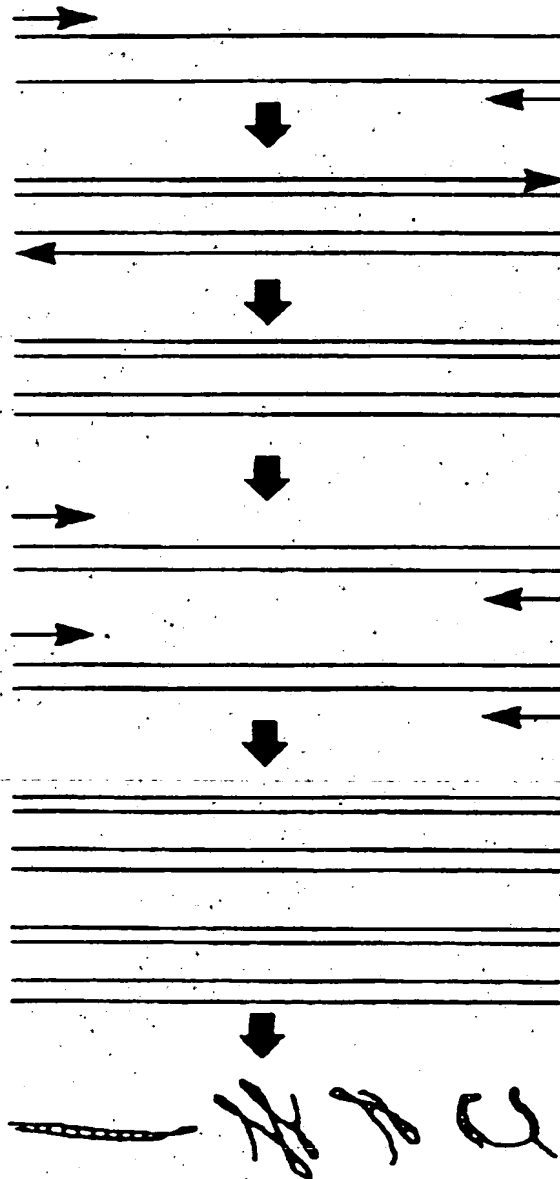
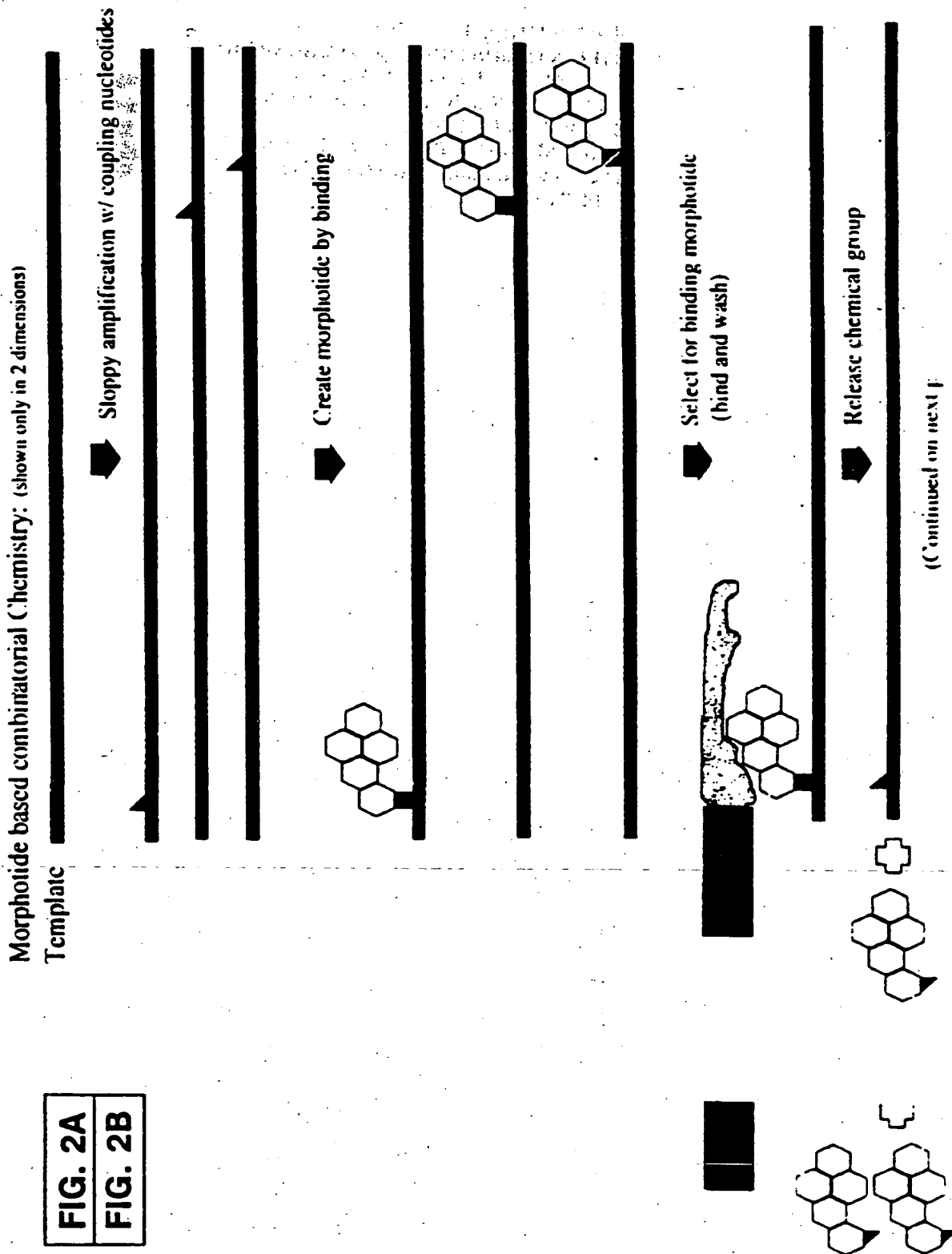


FIG. 2A

FIG. 2A

FIG. 2B



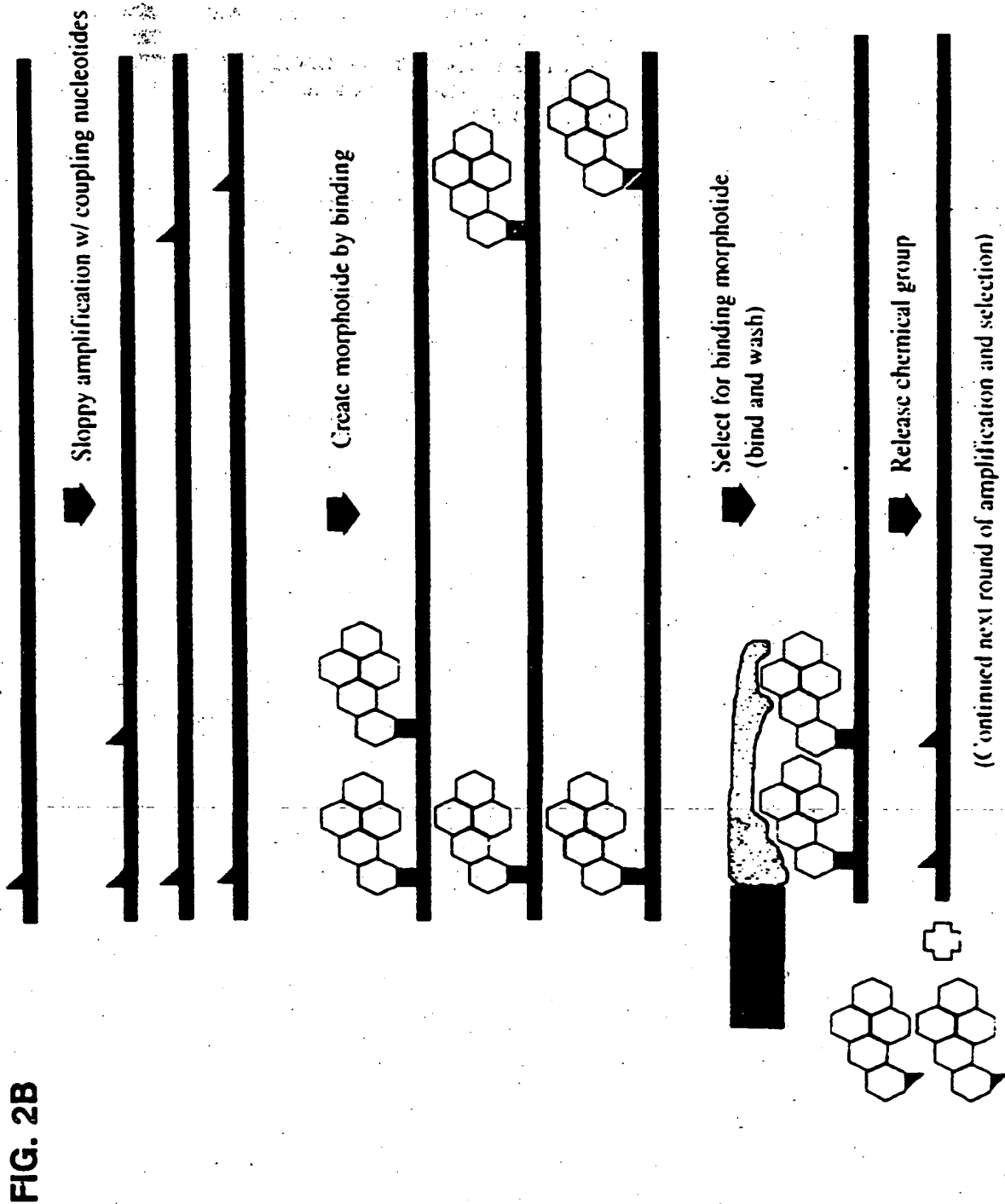
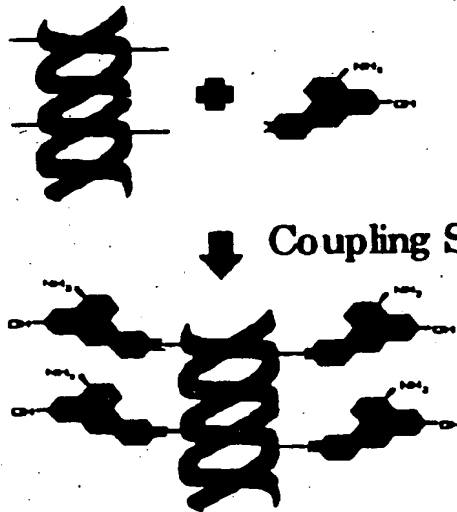


FIG. 3A

FIG. 3A FIG. 3B

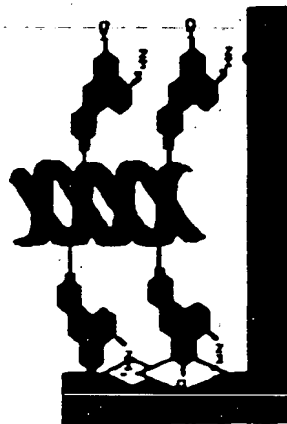
Reversible Coupler

Shape & Structure Library



Coupling Step

Bind



Elute w/  
pH Shift

e.g., Cellular  
Receptor

PCR  
Mutate

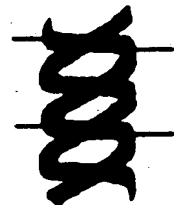


FIG. 3B

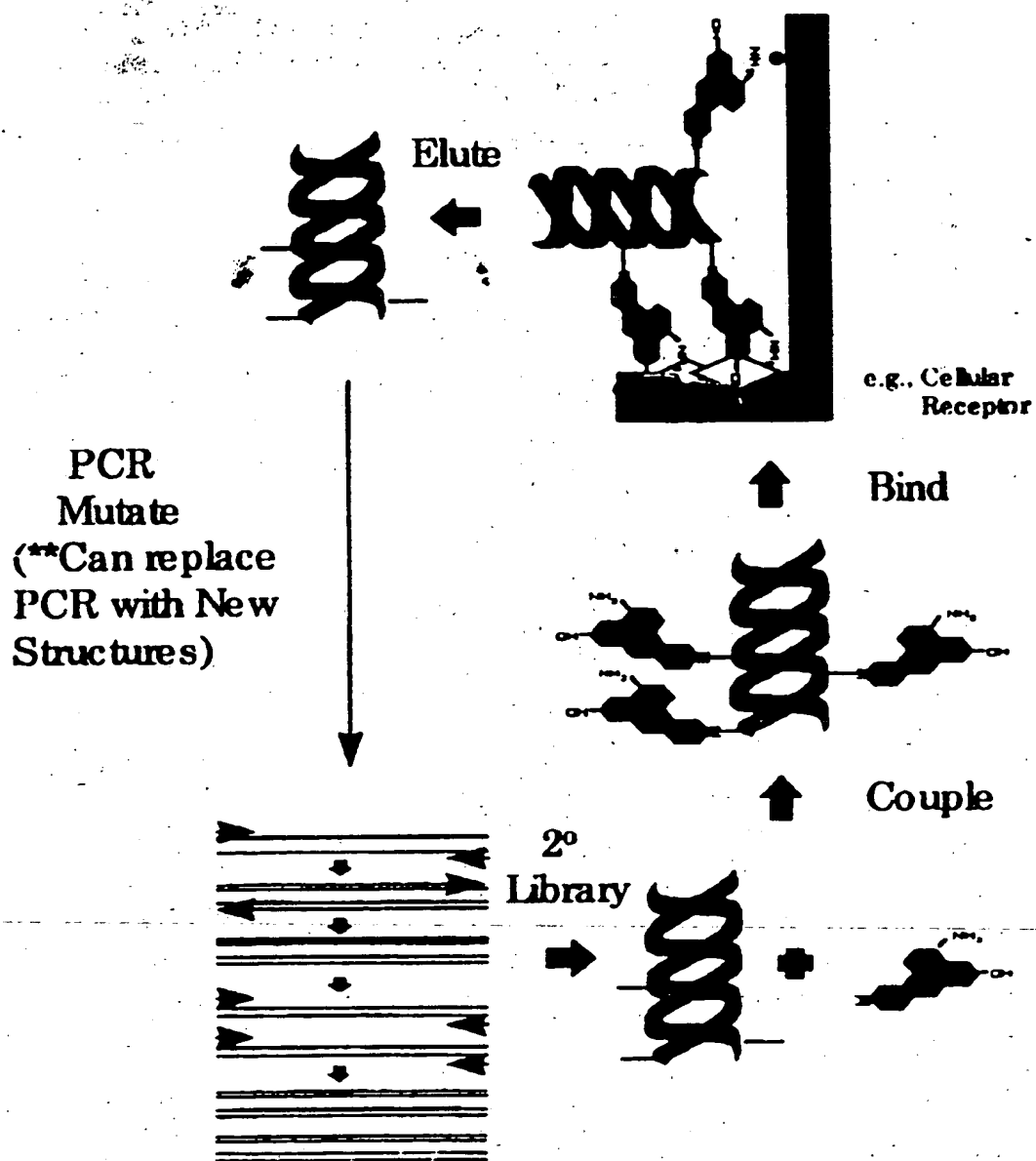
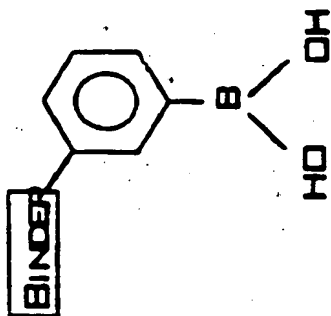


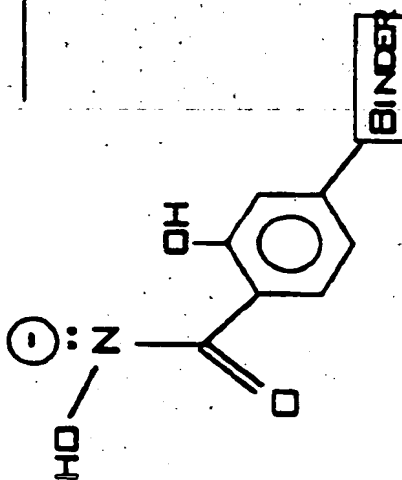
FIG. 4

Candidate bioconjugate:  
Phenylboronic Acid

↓ SIO<sub>2</sub> CHEMISTRY COUPLING TO ATTACH



CONDENSATION



$pK_A = 4.2$

$K_D = 10^{15}$

REVERSIBLE COMPLEX 1.5 UNITS OF PH = DISSOCIATION BY HYDROLYSIS

CAN TRAP AT PH 8 & CAN RELEASE

